From: WAYNE HEDBERG (WHEDBERG)
To: JBURNS
Date: Wednesday, June 15, 1994 3:50 pm
Subject: MOAB SALT UPDATE

LOREN MORTEN OF DWQ CALLED ME TODAY RE: OUR MOAB SALT LETTERS TO LARRY MIZE! THOUGHT I'D BEST UPDATE YOU SO YOU CAN UPDATE THE TRACKING SUMMARY SHEETS.

DWQ SENT A REVIEW LETTER TO MOAB SALT ON 6/14/90 ON THE REVISED CONCEPTUAL WATER CONTROL PLAN. MOAB SALT RESPONDED BY LETTER DATED 10/11/90 TO DWQ'S CONCERNS (WHICH DWQ APPARENTLY FAILED TO FORMALLY RESPOND TO). LOREN FAXED ME A COPY OF MOAB SALT'S LETTER WHICH I'VE READ AND SENT TO THE MINE FILE.

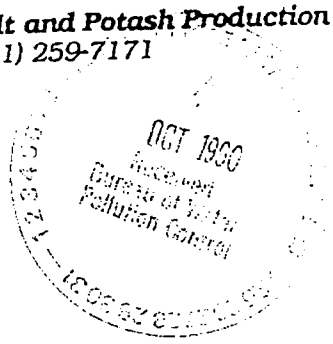
LOREN WILL DRAFT A LETTER TO MOAB SALT ASKING FOR FOLLOWUP INFORMATION BASED UPON COMMITMENTS MADE IN THE 10/11/90 LETTER FROM MOAB SALT. HE AGREED TO CC US WITH A COPY OF ALL LETTERS THAT ARE SENT TO THE OPERATOR IN THIS REGARD. DWQ WILL SUSPEND TAKING ADDITIONAL ACTION PENDING THEIR RECEIPT AND REVIEW OF MOAB SALT COMPANY'S RESPONSE.

A COPY OF THIS E-MAIL HAS BEEN SENT TO THE MINE FILE (M/019/005).

Moab Salt, Inc.

P.O. Box 1208 Moab, Utah 84532

Salt and Potash Production
(801) 259-7171



October 11, 1990

Mr. Don A. Ostler
Executive Secretary
Department of Health
Division of Environmental Health
P. O. Box 16690
Salt Lake City, Utah 84116-0690

Re: June 14, 1990 Comments on the Revised Conceptual Plan

Dear Mr. Ostler:

I am writing to respond to the comments and concerns noted in your June 14, 1990 letter, and also to update you on the progress we have made to date.

As we have previously discussed with Loren Morton, utilizing an appropriate leak detection system while making repairs to our evaporation ponds as part of our annual maintenance program is the only economically viable way to address concerns of any leakage from the ponds. The economics of our mining operation simply will not support the tremendous expenditures pond relining would require.

We have reviewed the relevant literature on electrical leak detection as Loren recommended. We have also talked to companies utilizing this detection method and to their customers. We have experimented with leak detection equipment using a 125-VDC power source and were able to identify leaks in a test pond liner covered with six inches of salt and an additional two inches of brine. We are now planning to try this technique in one of our operating ponds. We do not yet know if the technology we are using will be directly transferable to operational-sized ponds. If this detection method should continue to be successful, we will be able to examine the ponds using this apparatus as a part of our pond maintenance program. As I noted to Loren, this can be a "win-win" solution for Texasgulf and the state since the system will aid in leak detection and will assist our company in reducing loss of valuable brines.

We have also made progress in the No. 3 Canyon area. The sumps in the canyon have been either repaired or replaced and reactivated. Any brine collected in these sumps is pumped to the containment area behind Kelly Dam and thence to the scavenger brine reclaim system.

I would also like to address the Bureau's comments on the revised conceptual plan attached to the June 14, 1990 letter:

1. Conceptual Plan and Construction Permit Approval: We contacted our legal counsel to determine what actions would be necessary to achieve compliance with UAC R448-1-2. Our counsel has advised us that UAC R448-1-2 does not require permitting for our existing systems and structures as this statute only pertains to new construction involved with "treatment or discharge of wastewater." If your office has any additional information in this area, we would appreciate it if you would forward that information to us.

We should put them straight on this

2. Evaluation of Historical Data: This comment is well taken. Any deviation from the field and laboratory parameters in Section 2.1 of the conceptual plan should be noted.

2B. Local Springs: The duration of quarterly sampling should continue until it is mutually agreeable that the sampling frequency should be yearly. We suggest if quarterly sampling shows no significant variations in the first two years, annual sampling should be sufficient.

2C1, 2D, 2E. We are working on the implementation of the electrical leak detection system. As you proposed, this will obviate the need for a water balance in the pond area and monitor wells in the No. 3 Canyon.

2C2 Brine Lake Volume: As we have previously discussed, there are many complexities in preparing an accurate lake volume analysis. We would like to discuss the Bureau's concerns regarding this calculation and appropriate methodologies.

2F. As noted above, an acceptable measurement system for the water balance calculation will need to be agreed upon.

2G. The slope of the canyon in the salt storage area is such that there is little opportunity for seepage. When moisture is added to the salt by rainfall, the runoff immediately flows to the brine lake where it is captured, otherwise there is no moisture present which would allow the formation of brine or allow seepage.

If you have any questions or concerns regarding the above, do not hesitate to contact me.

Sincerely,

E. K. York

E. K. York
General Manager

EKY/mp